AN ACCOUNT OF THE BREEDING HABITS OF *PUFFINUS AUDUBONI* IN THE ISLAND OF GRENADA, WEST INDIES, WITH A NOTE ON *ZENAIDA RUBRIPES*.

BY GEORGE N. LAWRENCE.

I HAVE received a letter from Mr. John G. Wells in which he writes as follows: "I had an outing on Easter Monday, and was fortunate enough to procure a bird new to our fauna, a description of which I enclose, and skins go by book post, which I trust will reach you safely, and that I shall soon have the pleasure of reading your decision on them."

The birds sent proved to be *Puffinus audubonì*. The following letter from Mr. Wells, dated Grenada, April 23, 1888, gives an account of his finding and procuring specimens of it while breeding, and also some facts connected with its life history.

"About eight or ten years ago numbers of dried birds used to be brought in to the market at Greenville for sale; they were young birds and very fat. The men who sold them said they were the young of the 'Diablotin,' and were caught in holes, on a small island to the eastward called Mouchoir Quarré. I endeavored to procure a live one but without avail, and in fact so many improbable stories were told concerning this bird, that I looked upon the 'Diablotin' as a myth, and concluded that the dried birds were the young of some species of Gull. My interest in the matter has, however, been recently revived. On Easter Monday last (2nd April, 1888) I paid a visit to a small islet called Labaye Rock, about a mile off the Port of Greenville, a place where I had been on many previous occasions. On exploring the Rock, a young bird was discovered in a hole under a stone; it was covered with down; in fact it seemed like a ball of fat enclosed in down. One of the boatmen pronounced it to be a young 'Diablotin'; this, as you may suppose, caused me to make a thorough search, with the happy result that I found an adult bird with a young one in one hole, and a full-grown female and one egg in another hole. The birds on being brought out into the light appeared to be quite foolish, and beyond a feeble attempt to bite seemed to make no effort to escape. I kept them alive for some days; they would take no food during the day, remaining perfectly quiet, but at night they fed on scraps of fish, and at intervals uttered a peculiar cry resembling a cat howl.

"They evidently lay but one egg, as only one young was found in each hole, and the egg which I got was highly incubated; it is of a dull white color and measures $2'' \times 1\frac{3}{8}''$.

"The name 'Diablotin' in this case is not to be depended upon, as the fishermen and boatmen about here seem to apply that name to any strange sea bird which they meet.

"The bird appears to be a Petrel, perhaps a well-known species, but it is new to me, and I believe has not been noted from this island. I send you by book post the skins of an adult female and the young bird found in the same hole."

Dr. Henry Bryant found it to be abundant in the Bahamas. His accounts of its breeding and of the size of the egg agree closely with that given by Mr. Wells. It appears to be also quite common in Bermuda, and several accounts of its capture there while breeding, may be found in Baird, Brewer and Ridgway (Water Birds of N. A., Vol. II).

The general coloring of the nestling sent by Mr. Wells is dusky gray, whitish on the abdomen. It seems large for a bird in its downy stage of plumage, measuring $9\frac{3}{4}$ inches in length. The adult measures in length (fresh) $13\frac{7}{8}$ inches; in 'Water Birds of North America' it is stated to be about 11 inches.

These specimens are in the National Museum.

The 'Diablotin' formerly inhabiting the Island of Guadeloupe, W. I., of which a very full history is given by Père Labat, in his 'Voyage aux Isles de l'Amerique,' published in 1724, and comprising seven quarto pages, was a very different bird. It has been considered extinct there for a long time, and I think has not been satisfactorily identified with any known species.

Père Labat gives a full and interesting account of its habits, the hunt (chasse) after it on the 'Souphriere' of Guadeloupe, with a description of its size and plumage; there is also a plate of it.

It appears by his description and the plate, that the entire plumage was black; the shape of the bill in the plate is unlike that of a Petrel, but much resembles that of a Raven, but it may be improperly drawn. What the species was is a problem very desirable to be solved.

While breeding they were constantly pursued by the natives for food, when found in their holes there was no difficulty in their capture, as they made no efforts to escape. It would seem as if finally all were killed by persistent persecution, thus being a parallel case to that of the Great Auk.

As this old work is not very accessible to students, I have thought best to give the translation of a few extracts from it. He says—"This bird is about the size of a pullet; its plumage is black; it has the wings long and strong, the legs rather short, the feet like those of a duck, but furnished with strong and long claws, its bill is long of a good inch and a half, curved, pointed, extremely hard and strong; it has large eyes near the top of the head, which serve them admirably well during the night, but are nearly useless in the daytime, as they cannot endure the light nor discern objects, for when it is surprised by the day outside of its retreat, it knocks against anything with which it comes in contact and finally it falls to the ground.

"These birds live on fish which they procure during the night at sea; when through with their fishing, they return to the mountain, where they take to their holes like rabbits, and until night has come again do not return to the sea. The flesh is blackish with a little scent of fish, otherwise it is good and very nourishing.

"It begins to appear towards the end of September. They are then found in pairs in each hole. They remain until the end of November, when they disappear."

He gives a very full and particular account of the search after them, and says: "In spite of the dangers and inconveniences of this hunting, my curiosity tempted me to accompany five negroes." They were assisted in finding the birds by dogs, and each hunter carried a pole seven or eight feet long with a hook at the end. They procured about two hundred birds; such numbers being obtained, easily accounts for their extermination.

NOTE ON *Zenaida rubripes*.

I avail myself of this opportunity to correct an error which occurred in the 'Catalogue' of Grenada Birds.* I received from Mr. Wells a male of *Zenaida rubripes* after I had finished writing the catalogue. The account of its receipt and description was written on a slip of paper to be inserted in the catalogue in its proper place, but by inadvertence it was put under *Engyptila wellsi*, p. 625, instead of under *Zenaida rubripes*, p. 624.

* Proc. U. S. Nat. Mus. Vol. IX, 1886, p. 625.